Contents

VOLUME 9, NUMBER 1, MARCH 1984

H. G. ANDREWARTHA: Ecology at the cross-roads 1

G. GOWING and H. F. RECHER: Length-weight relationships for invertebrates from forests in south-eastern New South Wales 5

W. D. J. KIRK: Ecological studies on *Thrips imaginis* Bagnall (Thysanoptera) in flowers of *Echium plantagineum* L. in Australia 9

M. C. CALVER: A review of ecological applications of immunological techniques for diet analysis 19

M. H. FRIEDEL: Biomass and nutrient changes in the herbaceous layer of two central Australian mulga shrublands after unusually high rainfall 27

J. L. MADDEN and C. R. A. TURNBULL: Life table analysis of leaf fall in Tasmanian cool temperate forests 39

I. R. NOBLE: Mortality of lignotuberous seedlings of *Eucalyptus* species after an intense fire in montane forest 47

E. C. MORRIS and P. J. MYERSCOUGH: The interaction of density and resource levels in monospecific stands of plants: a review of hypotheses and evidence 51

THESIS ABSTRACTS 63

BOOK REVIEWS 67

VOLUME 9, NUMBER 2, JUNE 1984

M. S. HOPKINS and A. W. GRAHAM: Viable soil seed banks in disturbed lowland tropical rainforest sites in North Queensland 71

J. B. KIRKPATRICK: Altitudinal and successional variation in the vegetation of the northern part of the West Coast Range, Tasmania 81

P. W. WEISS and I. R. NOBLE: Status of coastal dune communities invaded by *Chrysanthemoides monilifera* 93

P. W. WEISS: Seed characteristics and regeneration of some species in invaded coastal communities 99

P. W. WEISS and I. R. NOBLE: Interactions between seedlings of *Chrysanthemoides monilifera* and *Acacia longifolia* 107

E. C. SAXON and M. L. DUDZIŃSKI: Biological survey and reserve design by Landsat mapped ecoclines — a catastrophe theory approach 117

S. A. CORBET and E. S. DELFOSSE: Honeybees and the nectar of *Echium plantagineum* L. in south-eastern Australia 125

H. WILLIAMS and A. M. M. RICHARDSON: Growth energetics in relation to temperature for larvae of four species of necrophagous flies (Diptera: Calliphoridae) 141

G. G. WHITE: Short note — Variation between field and laboratory populations of *Tribolium castaneum* (Herbst) (Coleoptera: Tenebrionidae) 153

THESIS ABSTRACTS 157

BOOK REVIEWS 159

VOLUME 9, NUMBER 3, SEPTEMBER 1984

L. J. WEBB, J. G. TRACEY and W. T. WILLIAMS: A floristic framework of Australian rainforests 169

A. R. WILLIAMS: Changes in *Melaleuca* forest density on the Magela floodplain, Northern Territory, between 1950 and 1975 199

D. A. MORRISON: Altitudinal variation in *Leptospermum flavescens* Sm. (Mytaceae) 203

J. C. Z. WOINARSKI and J. M. CULLEN: Distribution of invertebrates on foliage in forests of south-eastern Australia 207

T. N. PETNEY and C. M. BULL: Microhabitat selection by two reptile ticks at their parapatric boundary 233

B. J. FOX and M. D. FOX: Small-mammal recolonization of open-forest following sand mining 241

R. A. FARROW: Detection of transoceanic migration of insects to a remote island in the Coral Sea, Willis Island 253

M. J. BROWN, D. A. RATKOWSKY and P. R. MINCHIN: A comparison of detrended correspondance analysis and principal co-ordinators analysis using four sets of Tasmanian vegetation data 273

J. A. TAYLOR, G. R. FRIEND and M. L. DUDZINSKI: Influence of sampling strategy on the relationships between fauna and vegetation structure, plant lifeform and floristics 281

B. C. LONGSTAFF: An extension of the Leslie matrix model to include a variable immature period 289

B. B. LAMONT and R. M. COWLING: Short note — Flammable infructescences in *Banksia*: a fruit-opening mechanism 295

BOOK REVIEWS 297

VOLUME 9, NUMBER 4, DECEMBER 1984

M. WESTOBY: Some dangers for ecology on the way to becoming a profession 301

R. W. BRAITHWAITE, M. L. DUDZINSKI, M. G. RIDPATH and B. S. PARKER: The impact of water buffalo on the monsoon forest ecosystem in Kakadu National Park 309

B. J. FOX and A. R. POPLE: Experimental confirmation of interspecific competition between native and introduced mice 323

P. DALE, K. HULSMAN, B. R. JAHNKE and M. DALE: Vegetation and nesting preferences of black noddies at Masthead Island, Great Barrier Reef. I Patterns at the macro-scale 335

K. HULSMAN, P. DALE and B. R. JAHNKE: Vegetation and nesting preferences of black noddies at Masthead Island, Great Barrier Reef. II Patterns at the micro-scale 343

B. G. COLLINS, C. NEWLAND and P. BRIFFA: Nectar utilization and pollination by Australian honeyeaters and insects visiting *Calothamnus quadrifidus* (Mytaceae) 353

C. W. MEREDITH, A. M. GILMORE and A. C. ISLES: The ground parrot (*Pezoporus wallicus* Kerr) in south-eastern Australia: a fire-adapted species? 367

G. F. GRIFFIN and M. H. FRIEDEL: Effects of fire on central Australian rangelands. I Fire and fuel characteristics and changes in herbage and nutrients 381

G. F. GRIFFIN and M. H. FRIEDEL: Effects of fire on central Australian rangelands. II Changes in tree and shrub populations 395

P. W. WEST: Inter-tree competition and small-scale pattern in monoculture of *Eucalyptus obliqua* L'Herit 405

C. P. OHMART: Is insect defoliation in eucalypt forests greater than that in other temperate forests? 413

A. W. SCOTT and R. D. B. WHALLEY: The influence of intensive sheep grazing on genotypic differentiation in *Danthonia linkii*, *D. richardsonii* and *D. racemosa* on the New England Tablelands 419

BOOK REVIEWS 431